BRIEFING SHEET

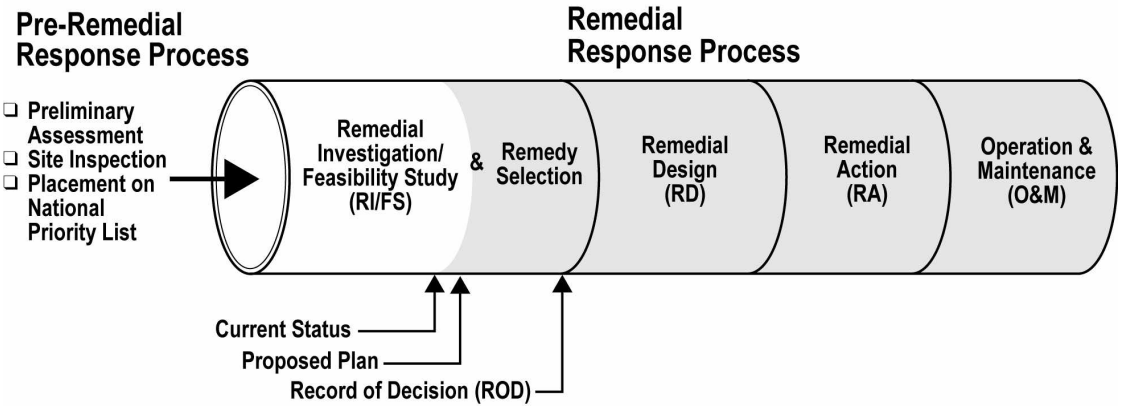
PROGRESS REPORT
ON THE PROPOSED CLEANUP PLAN

COEUR D'ALENE BASIN REMEDIAL INVESTIGATION/FEASIBILITY STUDY
APRIL 2001

The U.S. Environmental Protection Agency (EPA), in cooperation with the States of Idaho and Washington, the Coeur d'Alene and Spokane Tribes, and the federal Natural Resource Trustees, (hereafter referred to as the "governments") is developing a proposed plan to cleanup contamination resulting from past mining practices in the Coeur d'Alene Basin. The target date for issuing the preferred alternative for public comment is late July 2001. The purpose of this progress report is to give the public a sense of the priorities and cleanup approaches that the governments are likely to propose later this year. This update identifies areas where the governments are in general agreement as well as issues or concerns that the governments are continuing to discuss and resolve.

The draft Feasibility Study (FS) was distributed for public review in December 2000. The FS includes an evaluation of a range of cleanup alternatives for protection of both human health and the environment. These alternatives, which provide a menu of cleanup options, are being used to formulate the priority cleanup activities presented here. This is a preliminary view of the thoughts of the governments regarding cleanup. Once completed, the proposed plan will undergo a formal public comment process (Figure 1). The actual remedy selected may be the same or different than the proposed plan, depending on public input. The recommendations can be modified based upon stakeholder input and/or new information.

Figure 1
The Superfund Pipeline



The proposed plan will contain the preferred alternative for cleanup and is based on the results of the remedial investigation, the human health and ecological risk assessments, the feasibility study, and input from community groups, including the Idaho and Washington citizens advisory committees and the consensus building process led by the State of Idaho. The preferred alternative will describe in some detail the remedial activities associated with the initial cleanup activities while broadly describing the process to achieve long-term cleanup goals.

For protection of human health, a wealth of information from the implementation of the remedy in the Bunker Hill Box was used when evaluating the range of cleanup alternatives. Based on this evaluation, the governments have general agreement on the proposed remedy for protection of human health in the communities of the upper Basin, which includes areas upstream of the confluence of the North and South Forks of the Coeur d'Alene River. The governments are continuing discussions to identify appropriate solutions to resolve human health issues in the lower Basin.

In comparison to human health, it is a more difficult task to identify a comprehensive remedy for the protection of ecological life in the Basin. When preparing the ecological Feasibility Study alternatives, EPA assembled and evaluated a range of comprehensive alternatives designed to achieve compliance with regulations and long-term protection of the environment to the extent possible. The FS showed that the long-term goals, such as surface water quality standards for protection of aquatic life, will be difficult to achieve throughout the Basin given the extent of contamination. Therefore, the comprehensive alternatives presented in the FS are aggressive, some requiring a long time to implement at a significant cost. In addition, the alternatives included assumptions of source contribution and effectiveness of remedial actions for areas that are not yet well understood in the Basin.

Given the amount of uncertainty, the governments are proposing an incremental approach to cleanup, using the existing information available and learning from experience. A number of benefits could be realized by using an incremental approach to work toward the comprehensive remedy implementation.

- Remedies for protection of human health would be implemented in the communities as a first priority.
- Short-term cost, environmental, and socio-economic impacts would be moderated.
- Tangible, observable results could be achieved within a relatively short time in the areas addressed in the initial phase.
- The results of remedy implementation could be monitored to improve the effectiveness of subsequent remedial activities.

Opportunities would exist for innovative, cost-effective technologies to evolve over time.

EPA has a legal obligation to provide a comprehensive, sustainable remedy that complies with environmental laws and provides protection to human health and the environment. The governments will continue to work with the local communities to plan and implement progressive improvements toward ultimate protection of human health and the environment. This process will require significant resources, time and commitment from all parties to achieve long-term cleanup goals, specifically those associated with sediments and water quality.

Guiding Principles

The development of the proposed cleanup plan is guided by tribal, state, federal, and local environmental laws and regulations and the need for protection of human health and the environment. Guiding principles that are consistent with the National Contingency Plan will be used in selecting and implementing cleanup activities in the Basin and will be based on input from stakeholders. Cleanup goals with associated interim benchmarks will be described in the proposed cleanup plan.

- **Human health emphasis**. Protection of human health will be the first priority during the initial increment of cleanup in the Basin. This does not mean, however, that cleanup to address ecological concerns must wait until after protection of human health is achieved. The goal is to address protection of human health and the environment concurrently as resources are available.
- **Interim benchmarks**. Interim benchmarks are shorter-term goals that will allow measurement of progress of the remedy toward achievement of the comprehensive cleanup goals. Achieving comprehensive cleanup goals will be a lengthy process because of the large volume and widespread distribution of mining?impacted material within the Basin. Particularly, achievement of water quality criteria and risk-based sediment standards for the protection of aquatic and wildlife throughout the Basin will take a long time.
- **Incremental Implementation.** To achieve ecological protection, remedial actions will be implemented in stages and will be designed to meet ecological interim

benchmarks. As stated above, protection of human health is a top priority; therefore, actions to address human health would be conducted as comprehensively as possible in the first increment of work. These actions may need to include institutional controls to provide protection of human health until final cleanup goals are achieved, especially in the lower basin. A long-term monitoring program will be implemented to evaluate the effectiveness of the actions taken and to identify any unexpected changing conditions. A progression of incremental improvements will be required over a long period of time to achieve full compliance with environmental laws and complete protection of human health and the environment.

- **Prioritization of actions**. For the ecological alternative, cleanup actions will be prioritized to provide the "biggest bang for the buck" in meeting interim benchmarks or long-term cleanup goals. Cost-benefit analyses will balance the cost versus the benefit of near-term actions relative to longer-term ecological objectives and legal obligations.

- **Early Cleanup Actions**. Early cleanup actions conducted by EPA and others (e.g. Silver Valley Natural Resource Trustees' removals, UPRR rail-to-trails) will be evaluated for consistency with long-term cleanup goals. Additional actions in these areas may be necessary to achieve compliance with environmental laws or protection of human health and the environment.

- **Future land uses**. The preferred alternative is being developed based on the assumption that future land use will be similar to current or reasonable foreseeable future land use. For example, it is assumed that agricultural land in the Lower Basin will continue to be used for agriculture. Should land use change (e.g., agriculture use to residential use), additional actions may be needed for protection of human health and the environment. Cleanup levels may vary depending upon specific land use.

- **Removals**. The governments recognize the difficulties and problems associated with large-scale sediment and soil removals, including short-term impacts to the quality of life, environment, and local economy. Considerations for large-scale removals include accessibility, property use and ownership, metals concentration and leachability, topsoil requirements, repository capacity, and ecological impacts. Removals in some cases may be the most effective approach to assure the permanent elimination of contaminants that affect human health and the environment.

- **Preservation of infrastructure**. None of the alternatives under consideration include the removal of existing critical infrastructure (e.g., primary roads, highways, and communities) in order to excavate contaminated soils or sediments. In instances where other infrastructure is affected, it will be repaired as necessary.

- **Habitat improvement.** Remediation activities will be conducted in such a manner to improve fish and wildlife habitat. Habitat criteria for the river system include adequate food (e.g., vegetation and insects), pools and riffles and shade.

- **Eminent domain**. The governments do not intend to use eminent domain authority to force property owners to relocate or allow removals on their property. At selected locations, the removal or treatment of soils may be important to the success of long-term public health or water quality requirements. Every effort will be made to work with individuals where cleanup is warranted.

- **Long-term operations and maintenance (O&M) requirements**. It is recognized that long-term operation and maintenance is a component of any comprehensive remedy implemented in the Basin. The governments intend to support development and use of alternative technologies for cleanup to minimize operations and maintenance costs.

- **Technology Development**. Development and use of alternative technologies (e.g. stabilization of metals to reduce bioavailability, solubility in water, and physical transport, or identification of growth media alternatives to native topsoil) will be continued, building upon pilot tests that are planned or currently underway in the Basin.

- **Repository Siting and Topsoil Availability**. It is anticipated that disposal of excavated sediments and soils will require development of one or more permanent waste repositories. Siting of repositories and use of topsoil in the Basin for capping are recognized as technical challenges that are of interest to the communities. The governments will work with the communities to identify suitable repository sites and possible alternative sources of topsoil that minimize impacts to the communities and the environment.

- **Stakeholder Participation**. The basis for prioritization of the sites for action and development of the remedial design will be done through an open process with a strong component of public participation.

- **Additional Restoration Activities**. The Natural Resource Trustees (i.e. States, Tribes, and Federal Trustees) reserve their ability to implement additional actions to address residual injury not addressed by the remedy

Note from the Washington governments: There is a recognition that some aspects of these "Guiding Principles" may not be appropriate in Washington, or conform to cleanup laws and requirements for Washington State and the Spokane Tribe. The primary goal stated by the Spokane Tribe is to return their resources back to the pre-contaminated conditions in the shortest time possible. The Tribe believes that, while the guiding principles may influence short-term spending of Superfund dollars in the Silver Valley, strict adherence to these principles for the duration of cleanup may not enable EPA to achieve long-term goals. The Spokane Tribe is not interested in long-term institutional controls as the solution to environmental contamination.

Human Health Protection

Preventing excessive lead exposures in young children and pregnant women is a top priority of the preferred human health alternative.

What are the human health concerns for children and subsistence users? Exposures to lead in soil and dust from the home and surrounding communities are the primary human health concerns in the Basin. Potential lesser exposures are from lead in fish from the Lower Lakes and arsenic in shallow drinking water wells in the side gulches of the Upper Basin. The risk assessment also identified potential risks to recreational and subsistence users in the lower basin. These exposures include, but are not limited to, recreating on contaminated beaches, swimming in the Coeur d'Alene River, gathering water potatoes and other cultural plants throughout the wetlands, and eating large amounts of fish. The State of Washington is very concerned about the risks that exist to recreational users along the Spokane River. These exposures include contaminated beaches and fish consumption.

What types of things might be included in the preferred alternative? The ultimate remedy for childhood exposure to lead is prevention. Proposed actions include source removal and containment as well as public information and intervention. The proposed soil cleanup level for removal and capping of residential yards and common use areas in towns, cities, communities, and residential yards is 1000-ppm lead. Soil with lead concentrations between 700 ppm and 1000 ppm would require a barrier such as vegetation to prevent exposure and distribution of dust. Yard soil with lead concentrations greater than 1000 ppm would generally be removed to a depth of one foot (two feet in garden areas) and backfilled with clean soils and/or capped. Formal recreational areas in Idaho such as boat ramps, picnic areas, and campgrounds with surface soil containing lead concentrations of greater than 700 ppm would be capped with a foot of clean soil. Excavation of soils in recreational areas may also be proposed, where appropriate. The State of Washington firmly believes the interim preferred alternative should include the cleanup of Spokane River beach areas. Suitable proposed barriers to exposure of lead contaminated soil and dust in common use areas such as streets, alleys, rights-of-ways, mine and mill sites, and playgrounds include removal, capping and vegetation. For residences where it is determined to be necessary, interior cleaning would occur only after exterior sources of contamination have been permanently remediated to prevent recontamination. Programs for paint abatement and stabilization would be incorporated with the soil cleanup. A long-term basinwide institutional controls program would be implemented to maintain integrity of the human health remedy after it is implemented.

In the interim before sources of lead exposure are adequately controlled, an intervention

program similar to the Panhandle Health District's Lead Health Intervention Services would provide personal health and hygiene information and vacuum cleaner loans to help mitigate exposure to contaminants. Blood lead monitoring would be offered to identify and treat families with excessive lead exposures. Nursing follow-up services and sampling of yards and homes would be available.

To reduce exposure from metals in drinking water, an alternative water supply would be provided to residences in areas where the existing water supply contains metals at concentrations greater than the maximum contaminant levels (MCLs). Residences with affected private wells within water districts would be connected to the existing public water supply system. For residences outside water districts (mostly in the tributary gulches), the alternative water supply would most likely consist of point-of-use treatment or new drinking water wells installed into a suitable aquifer.

The potential for lead exposure through fish consumption would be managed through educational resources available to fishermen and other recreationists about the potential health risk of consuming contaminated fish caught from Lateral Lakes and health advisories for subsistence fishing. A fish consumption advisory already exists in the lower Basin and along a part of the Spokane River.

Decreases in the levels of metals in fish are expected to occur as a result of implementation of the ecological remedies but may not be sufficient to adequately reduce human health risks in the short term.

An important goal of the Coeur d'Alene Tribe is the full return of cultural resources and recreational uses in the Basin. Unrestricted use of these resources in the Lower Basin for Tribal cultural practices will require an aggressive long-term cleanup effort.

To reduce these exposures, all remedies that address wetland risks to waterfowl should contain habitat enhancement components that enhance water potato grounds as well as recreational beaches. The use of warning signage in the lower basin is not preferred as the long-term solution to the environmental contamination.

Ecological Protection

Three priority issues have been proposed as an initial primary focus with respect to ecological protection.

- Dissolved metals (particularly zinc and cadmium) in rivers and streams. These metals have harmful effects on aquatic receptors, including fish. In addition to loading from contaminated soils and sediments, another source of loading is from contaminated groundwater recharge to the river and streams.

- Lead in wetlands and floodplains. Existing lead contamination has harmful effects on waterfowl and plants.

- Particulate lead in the surface water. Lead transported downstream in the river system is a continuing source of contamination to Coeur d'Alene Lake and the Spokane River. During flood events, lead transported by the river also impacts the wetlands and floodplains.

Dissolved Metals in Rivers and Streams

Why are dissolved metals a concern? High levels of dissolved metals, particularly zinc and cadmium, exist in the river system in the Basin. The dissolved metals concentrations and impacts from mining currently prevent the river system fully supporting beneficial uses. Full support of beneficial uses is determined by review of the water body based on numeric criteria and density and diversity of the biological community.

Ambient water quality criteria (AWQC) for protection of aquatic organisms have been established that set allowable concentrations of contaminants, including metals, in surface water. Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as Superfund), compliance with water quality standards throughout the Basin is a legal requirement, unless conditions for a waiver can be justified. Site-specific criteria are also being developed for some water bodies.

The concentrations of cadmium and zinc in some stretches of the South Fork and its tributaries exceed the AWQC by 10 to greater

than 100 times. AWQC violations extend into Coeur d'Alene Lake and the Spokane River. Some of the fish native to the Basin, including bull trout and cutthroat trout, are very sensitive to dissolved metals, specifically cadmium.

Most of the dissolved metals come from mill tailings that were washed downstream and deposited as sediments in the bed, banks, and floodplains of the streams, lakes, and rivers. Surface and groundwater percolates through the tailings-impacted sediments and dissolves metals. The water discharges into the streams and rivers, carrying the dissolved metal load with it. There are extensive areas of tailings-impacted sediments throughout the historic floodplain, including tailings under the I-90 corridor. The sediments and tailings in the Bunker Hill Box have been identified as a significant source of dissolved metals, specifically zinc, to the river system. In addition to floodplain sediments, drainage from adits and leachate from waste rock, tailings piles, and tailings impoundments are sources of dissolved metals.

What types of things might be included in the preferred alternative? The widespread occurrence of the tailings-impacted sediments makes it difficult to reduce dissolved metals throughout the entire Basin to concentrations that fully support some sensitive native fish species. It is not expected that this could be achieved throughout the Basin within a single lifetime using a practical cleanup scenario. However, further improvements to the ecosystem can begin in the short term and continue for many decades by combining remedial actions with natural attenuation. In addition, some portions of the impacted areas can likely be returned to levels that will greatly improve the ecosystem locally. The governments are committed to the principle that a healthy ecosystem should be provided for future generations.

In the shorter term, the interim benchmark is reduction of dissolved metals to concentrations that allow substantial improvement to the fisheries and the ecosystem of the upstream reaches of the South Fork and some of its tributaries. Fish and aquatic organisms that are more tolerant of metals than the native fish could return more quickly. The population and species diversity of fish and aquatic organisms are expected to continue to improve as cleanup progresses in the Basin.

Where tailings impact water quality, initial remedial actions would focus on priority areas combining removals of metals-contaminated sediments, removals and capping of tailings piles, and pilot tests to develop practical treatment and isolation methods. For adit and leachate discharges, cleanup methods include source control (e.g., excavation or capping) combined with water treatment. Surface water quality is significantly impacted in the vicinity of Kellogg and the Bunker Hill "Box". Continued identification and implementation of appropriate cleanup technologies will be necessary to significantly reduce dissolved zinc entering into the South Fork of the Coeur d'Alene River in this part of the Basin.

Priority areas would be selected based upon those reaches where the most load reduction can be practically achieved and where the best chances exist for re-establishing a sustainable trout fishery. In addition to metals reduction, an important component of the goal of achieving a sustainable fishery includes establishing a suitable fishery habitat.

Lead in Floodplains/Wetlands

Why is lead in the floodplain/wetlands a concern? Sediments throughout floodplains of the lower Coeur d'Alene basin are contaminated with lead that has washed downstream over the years from upper basin mining activities. Sediments are also remobilized and transported into Coeur d'Alene Lake and the Spokane River. Lead-contaminated sediments in the floodplains (including wetlands, bottom sediment of the lateral lakes and low-lying upland areas) have caused adverse effects to wildlife. Notably, waterfowl (e.g., Tundra Swan and ducks) ingest highly contaminated sediment to the extent that many have suffered toxic effects or died from ingestion of lead. The U.S. Fish and Wildlife Service has documented numerous deaths among Tundra Swan in these areas.

What types of things might be included in the preferred alternative? The long-term goal is to reduce metal exposure of plants, wildlife and fish throughout these areas to levels that are fully protective of the ecosystem. The governments are committed to the principle that a healthy ecosystem should be provided for future generations. Improvements to the ecosystem can begin in the short term and continue for many decades by combining remedial actions with natural attenuation.

Because the total contaminated floodplain area in the lower basin is so large, it is important to prioritize areas to improve the ecosystem locally. For example, one interim benchmark is the reduction of waterfowl mortality. Resource agencies have identified high-priority areas in the lower basin based on high waterfowl use and high levels of lead in sediments, including the wetlands surrounding Thompson Lake and the area known as Strobel Marsh.

A combination approach is envisioned for these areas although the details have not yet been worked out. Contaminated materials would be excavated from some areas and transported to a repository or a local area within the lateral lakes for consolidation. Other areas would be capped with a layer of clean soil to prevent feeding birds from becoming exposed to metals. If feasible, capping materials would be obtained from sources within the wetland unit, with the possibility of creating new ponds to increase diversity of habitat for waterfowl and fish. Soil treatment to reduce lead bioavailability may be applied in selected areas if effective treatment technologies are identified in pilot tests underway this year. Hydraulic controls (floodgates) and levees may also be required to prevent recontamination of treated areas. The need for these types of structures would be evaluated during remedial design. Once these areas have been cleaned up, other contaminated wetland units would then be addressed.

Lead in Surface Water

Why is lead in surface water a concern?
Lead in surface water is transported downstream to Coeur d'Alene Lake and the Spokane River, and may wash across and contaminate the floodplain during flood events. Two sources are suspected to contribute the major lead load in the lower basin: contaminated riverbank materials and sediments in the riverbed. The riverbanks in many areas of the lower basin are steep and actively eroding into the river primarily due to boat wakes. Riverbed sediments have become contaminated from materials transported from upstream and from the eroding riverbanks. This sediment is likely to be entrained during flood events and transported out of the river channel into the floodplain, where it is deposited.

What types of things might be included in the preferred alternative? The long-term goal is to reduce the lead load in sediment transported and deposited in downstream areas of the Lateral Lakes, Coeur d'Alene Lake and Spokane River. This is necessary to prevent recontamination of cleaned-up areas and the occasional exceedances of drinking water standards in Coeur d'Alene Lake and to protect wildlife from exposure.

In the near term, cleanup actions will focus on areas containing actively eroding riverbanks. The reaches for bank stabilization will be prioritized on the degree of erosion occurring and the concentrations of metals in the riverbank sediments. Remedial actions will include a combination of bioengineering and removals as necessary to create a sustainable river ecosystem. The extent of removal of contaminated material will be determined by concentration of metals in the river bank material, the likelihood that stabilized banks will remain stable into the future, site accessibility, and the presence of infrastructure. A challenge of removal is to find a repository location in the lower basin for the excavated materials. Sediment traps to catch material transported from upstream may be effective in the lower basin but more study is required to evaluate these structures. Because of the unknowns associated with the long-term behavior of the riverbed sediments and the potential for recontamination from upstream, remediation of riverbed sediments is not considered to be a high priority at that this time. Further study may indicate that removals of riverbed sediments are warranted in certain areas to prevent recontamination and to provide protection of human health and the environment.

Coeur d'Alene Lake

Is the lake a concern? The beaches and wading areas adjacent to Coeur d'Alene Lake and the Idaho portion of the Spokane River were sampled in 1998 and were found to be safe and did not exceed risk-based levels for recreational use. People using the beach areas for swimming, wading, sunbathing, etc. do not need to be concerned about health effects from exposure to mining contamination. Because the beaches were found to be safe, no cleanup will be needed in these areas.

The water in Coeur d'Alene Lake meets the safe drinking water standard for metals with the only exception found when the Coeur d'Alene River flows are high (e.g., during high spring run-off or

during flood events) causing short-term lead concentrations that exceed drinking water standards.

Some questions have been raised regarding the need to further evaluate potential risks to humans who eat whole fish or fillets taken from fish in the lake. Previous fish tissue sampling efforts did not include whole fish from Coeur d'Alene Lake and only a limited number of fillets were sampled. As a result, some uncertainty remains about the potential risks resulting from eating fish from the lake. The governments will continue to seek a means to resolve this issue.

Based on existing information, there does not appear to be mining-related contamination in the residential and commercial areas of the cities of Coeur d'Alene and Post Falls.

The water in the Lake exceeds the water quality standards for some metals (e.g., cadmium and zinc and intermittently for lead), posing a potential risk to fish or other aquatic life. The sediments at the bottom of the Lake contain mining contamination. Studies by the USGS indicate that under current lake conditions, there is some movement of the metals from the sediment into the water column. If the Lake water quality deteriorates due to nutrient enrichment, the metals in the sediments may be released more readily into the water column. Metals continue to enter the Lake via the Coeur d'Alene River that carries the metals from upstream sources. Long-term monitoring will be necessary to assure that contributions from the Lake bed sediments are not resulting in negative impacts to water entering the Spokane River.

What types of things might be included in the preferred alternative? The preferred alternative would continue the approach developed by the public in cooperation with the Clean Lakes Coordinating Council, Coeur d'Alene Tribe, IDEQ, and others when they developed the Coeur d'Alene Lake Management Plan. Full implementation of the Coeur d'Alene Lake Management Plan would be proposed to continue positive improvements in lake-water quality resulting from controls previously implemented. The past controls include:

- In the late 1960s, the direct discharge of tailings into the river was discontinued and settling basins and tailings impoundments were installed,
- In the mid-1970s, improved sewage treatment technologies were installed,
- Forestry best management practices (e.g., control of sediment runoff) have been implemented,
- The fertilizer plant at Bunker Hill ceased discharging,
- Agricultural water quality improvements have been implemented,
- Boat pump-out stations and restrooms at recreation areas have been installed,
- Lake protection educational materials have been distributed to lake shore owners and recreational users, and
- Kootenai County has implemented a site disturbance ordinance to control erosion from development sites.

Given the likelihood of community growth and land use changes, complete implementation of the Lake Management Plan is necessary for maintaining desired water quality in the lake.

Based on currently available information, there does not appear to be technical justification for active remediation (e.g., dredging, capping) of lakebed sediments. In addition, contaminated material excavated from other areas will not be disposed of in the lake.

Remediation efforts would focus on reducing riverine inputs that may continue to contribute to contamination of the lake and the Spokane River. The Coeur d'Alene Tribe, IDEQ and EPA, along with others, plan to continue to monitor the lake to evaluate the effects of upstream cleanup, potential sources of contamination, and potential impacts to the lake and the Spokane River. If conditions change or new information emerges that modifies our current understanding becomes available, additional actions will be evaluated.

Spokane River

Why is the Spokane River a concern? In response to metals contamination, the Washington State Department of Health and Spokane Regional Health District have issued two health advisories for the upper reaches of the Spokane River. The first advisory responds to the presence of elevated lead in shoreline and beach sediments frequented by

recreationalists. The second responds to elevated lead concentrations in fish. Recommended fish consumption limits for children and adults have been established, with particular emphasis toward children and pregnant women or women considering pregnancy.

The AWQC for dissolved zinc, cadmium, and total lead are exceeded in the Spokane River, due to metals that come from the Coeur d'Alene River via Coeur d'Alene Lake. Total lead and cadmium usually only exceed AWQC during and after high discharge periods in the Coeur d'Alene River, when the river carries a large sediment load.

The Spokane Tribe has expressed concerns that the previous studies do not fully account for the metals exposures that may be experienced by tribal members that practice a subsistence lifestyle. With support of EPA, the Tribe is planning additional testing and studies to evaluate these exposures.

What types of things might be included in the preferred alternative? Exposures of humans and ecological receptors to metals from localized accumulations of sediments along the Spokane River can be reduced using access controls, capping, and removals. The State of Washington does not support long-term reliance on institutional controls as an approach for reducing health risks along the Spokane River. The cleanup actions taken throughout the Coeur d'Alene Basin are expected to reduce the metals transported to the Spokane River. The overall effectiveness of these actions, including those in the Bunker Hill Box, will be monitored and evaluated as to their effectiveness to reduce the metals load to the Spokane River.

For the Spokane River**,** a limited number of sediment and soil sites in and adjacent to the Spokane River have been identified for cleanup on the basis of potential human and ecological exposures. The sites are located along a 16-mile reach of the river between the Idaho-Washington state line and Upriver Dam, which is upstream of the city of Spokane. The identified areas include shoreline sites and also a subaqueous site where sediment has accumulated directly behind Upriver Dam. These areas would be addressed to protect human health and the environment, and to comply with federal and state laws. A combination of access-controls, capping, and removals have been evaluated. A primary goal of the State of Washington as part of the near-term preferred alternative is to re-establish unrestricted access to shoreline recreational areas, remediate important fishery sites, and eliminate the potential for contaminant redistribution further down river.

The Spokane Tribe also envisions the need for monitoring of water, sediments, fish, and vegetation of the Reservation. The State of Washington supports continued monitoring of the upper reaches of the Spokane River. This monitoring program approach will be required as long as constituents of concern from current and historical releases pass into the State of Washington and down through the Reservation. A plan for monitoring the river where it passes through the reservation has been submitted by the Spokane Tribe to EPA for funding.

What are the Next Steps?

This update acts as a bridge between the draft Feasibility Study which evaluated the full range of cleanup alternatives, and the Proposed Plan, which will describe the preferred cleanup approach for the Basin. This update will be used as a tool to focus on-going public input on cleanup solutions that will achieve both human health and ecological goals. EPA and its partners look forward to continuing this critical dialog with the Basin communities using a variety of forums such as the Consensus Process, the CAC RI/FS Task Force, and the Washington CAC between now and the release of the Proposed Plan. Following public comment on the Proposed Plan, EPA will issue the Record of Decision, which describes the selected cleanup remedy. Community input will continue to be critical after the Record of Decision is issued. As described earlier in this report, some cleanup actions will occur incrementally in order to assess the effectiveness of those actions over time.

Priority cleanup activities can begin in the short term with additional improvements continuing into the future toward overall protection of human health and the environment. The governments are committed to working with the communities to provide a healthy environment for future generations to come.

Is the entire Coeur d'Alene Basin a Superfund site?

No, the area affected by Superfund designation does **not** include the entire Coeur d'Alene basin. Areas of the Coeur d'Alene basin where there are no hazardous substances from mining activities are not considered part of the Superfund facility. In other words, the vast majority of the Coeur d'Alene Basin is **not** within the Superfund facility.

- ❑ Superfund law states that the current Superfund facility includes all areas where hazardous substances (for example, mining contamination) have come to be located, both inside and outside the "21-square mile Box."

- ❑ The use of Superfund authorities allows EPA to seek access to Superfund dollars to fund cleanup activities where other sources of funding are not available.

- ❑ Based on available information, EPA is focusing the Remedial Investigation/Feasibility Study only on areas where it is reasonable to believe that mining contamination exists.

- ❑ Once the RI/FS is completed, we expect to select a cleanup plan in the Record of Decision (ROD) later this year. The ROD will identify areas that require cleanup and those that don't require further action because they are in compliance with existing environmental laws and they do not pose an unacceptable risk to human health or the environment. EPA can then proceed to remove or delete these areas from the Superfund list. In addition, EPA can also delete areas where cleanup has been completed. Deletion or partial deletion from Superfund is a separate legal action that is subject to formal public comment.

- ❑ Our focus remains on working with all parties to progress toward cleanup and environmental improvement in the Coeur d'Alene/Spokane Basin.